



## GIMIC at EPCC

Galaxies Intergalactic Medium Interaction Calculation  
A project of the Virgo consortium

Virgo is an international consortium of cosmologists that performs large numerical simulations of the formation of galaxies. Its Millennium Simulation is the largest ever calculation to follow the formation of the dark haloes that seed galaxies.

To understand the properties of the galaxies themselves, it is necessary to simulate how gas cools and forms stars in such haloes. GIMIC simulates the formation of galaxies in several regions selected from the Millennium Simulation, but now including hydrodynamics. This allows Virgo members to obtain unprecedented insight into how galaxies form on truly cosmological scales.

These simulations were performed within the DECI initiative of DEISA, and were run on HPCx with the assistance of EPCC.

